

R E M A R K S

In the Office Action dated September 2, 2003, claims 1, 3-7, 9 and 10 were rejected under 35 U.S.C. §102(b) as being anticipated by Apte. Claims 1, 3-7, 9, 10 and 14-16 were rejected under 35 U.S.C. §102(b) as being anticipated by Karella. Claim 2 was rejected under 35 U.S.C. §103(a) as being unpatentable over Apte in view of Hahn. Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Oppelt et al. in view of Apte. Claim 13 also was rejected under 35 U.S.C. §103(a) as being unpatentable over Apte in view of King. Claim 2 also was rejected under 35 U.S.C. §103(a) as being unpatentable over Karella in view of Hahn. Claim 13 also was rejected under 35 U.S.C. §103(a) as being unpatentable over Karella in view of King.

Claims 8 and 11 were objected to as being dependent upon a rejected base claim, but were stated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. With regard to claim 8, the Examiner stated the prior art discloses a detector as claimed in claim 7, but does not teach the mathematical product of the height and the absorption coefficient as set forth in claim 8. Applicant interprets this statement as meaning that the Examiner did not consider the limitations of claim 7 as being necessarily relevant to the indicated allowability of the subject matter of claim 8.

Therefore, claim 1 has been amended to bring the subject matter of claim 8 therein, but claim 7 has been retained in dependent form. Claim 8 accordingly has been cancelled. Claim 1 and claims 2-7 and 9 are therefore submitted to be in condition for allowance.

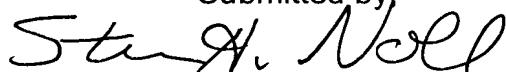
The subject matter of claim 11 has been incorporated in independent claim 10, and amended claim 10 is therefore submitted to be in condition for allowance in view of the indicated allowability of claim 11. Claim 11 accordingly has been cancelled.

Claim 12 has been amended to bring the allowable subject matter of claim 11 therein as well, and amended claim 12 therefore is submitted to be in condition for allowance.

Claim 13 has been cancelled. Claim 14 has been amended to add a method step corresponding to the allowable subject matter of claim 8, and claim 14 therefore is submitted to be in condition for allowance for the same reasons as claim 1. New claim 17 has been added which is a method claim corresponding to the subject matter of claim 7.

In view of the indicated allowability of the subject matter of claims 8 and 11, all claims of the application are submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

Submitted by,



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